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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY-DOCKET NO.	CONFIRMATION NO.
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10/757,570

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Frantz Germain

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EXAMINER

HOANG, ANN THI

ART UNIT

PAPER NUMBER

2836

MAIL DATE

DELIVERY MODE

05/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/757,570

Applicant(s)

GERMAIN ET AL.

Examiner

Ann T. Hoang

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,7,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiSalvo et al. (US 6,246,558) in view of Halbeck (4,002,951) and Knecht et al. (US 5,635,690).

Regarding claim 1, DiSalvo et al. discloses a circuit interrupting device (10, 200) comprising:

a housing (12);

a phase conductive path disposed at least partially within said housing (12) between a line side (34) and a load side (36), said phase conductive path terminating at a first connection capable of being electrically connected to a source of electricity, a second connection capable of conducting electricity to at least one load and a third connection capable of conducting electricity to at least one user accessible load;

a circuit interrupting portion (90, 92, 94) disposed within said housing (12) and configured to cause electrical discontinuity in said phase conductive path between said line side (34) and said load side (36) upon the occurrence of a predetermined condition;

switch means (52, 54, 56) disposed within said housing (12) for activating said circuit interrupting portion (90, 92, 94); and

a reset portion (30, 100, 102, 104, 106) disposed at least partially within said housing (12) and configured to reestablish electrical continuity in said phase conductive path.

The reference recites all the elements of claim 1 in claim 1 of the '558 patent, with the exception of switch means disposed within said housing for activating said circuit interrupting portion. See 11:62-67 and 12:1-18. Although a switch means is not explicitly provided in claim 1 of the '558 patent, the reference discloses switch means (52, 54, 56) disposed within said housing for activating said circuit interrupting portion. See Fig. 2, 6:36-67, 7:1-30, 8:25-57, and 11:47-53. The reference does not disclose that the switch means (52, 54, 56) is operated by a prong of a plug, so that both insertion of a plug into a receptacle in the housing and removal of a plug from a receptacle in the housing is effective to cause electrical discontinuity, or that the reset portion (30, 100, 102, 104, 106) includes a lockout portion preventing reestablishment of the electrical continuity in the absence of a plug inserted in the receptacle.

However, Halbeck discloses a circuit interrupting device comprising a switch means (50) for activating a circuit interrupting portion (10), wherein the switch means (50) is operated by a prong (28) of a plug (26) so that the circuit interrupting device automatically tests the operation of the system upon connector plug insertion. See abstract, Fig. 1, 2:32-52, and 3:8-21. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the switch means of DiSalvo et al. operated by a prong of a plug, as disclosed by Halbeck, in order to enable the circuit

interrupting device to automatically test the operation of the system upon connector plug insertion. Insertion of a plug into a receptacle in the housing would be effective to cause said electrical discontinuity.

Moreover, Knecht et al. discloses a circuit interrupting device in which a switch means is operated by a plug (160) being removed from a receptacle (12) to cause electrical discontinuity. See 1:6-13, 7:43-67, 8:1-2, 12:19-21 and 12:52-54. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the feature of the switch being operated by removal of a plug, as disclosed by Knecht et al., in the circuit interrupting device of DiSalvo et al. in view of Halbeck, in order to cause electrical discontinuity during absence of plug insertion as a safety measure for avoiding electrical shock.

Furthermore, Knecht et al. discloses a reset portion that includes a lockout portion preventing reestablishment of electrical continuity in the absence of a plug (64) inserted in a receptacle (12). See Fig. 2 and 6:19-34. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the reset lockout feature of Knecht et al. in the circuit interrupting device of DiSalvo et al. in view of Halbeck in order to, as a safety measure, prevent the receptacle from being electrically live when the plug was not present within that receptacle, as disclosed by Knecht et al. in 1:10-12.

Regarding claim 6, claim 6 recites the elements and features of claim 1 above in addition to:

a neutral conductive path terminating at a first connection capable of being electrically connected to a source of electricity, a second connection capable of

providing a neutral connection to at least one load and a third connection capable of providing a neutral connection to at least one user accessible load; and

said circuit interrupting device further comprising a reset lockout portion that prevents reestablishing electrical continuity in said phase and neutral conductive paths if said circuit interrupting portion is non-operational, if an open neutral condition exists or if a reverse wiring condition exists.

DiSalvo et al. recites these limitations of claim 6 in claim 1 of the '558 patent. See 11:62-67 and 12:1-24. Thus, claim 6 is rejected under the same reasoning as that of claim 1. See above rejection.

Regarding claims 11 and 12, both Halbeck and Knecht et al. disclose mechanical tripping by a prong. See Fig. 1 and 3:8-21 of Halbeck and 1:6-13, 7:43-67, and of Knecht et al. Thus, in the combination of DiSalvo et al. in view of Halbeck and Knecht et al. discussed above, the circuit interrupting portion disposed within said housing would be tripped mechanically by a prong.

3. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiSalvo et al. (US 6,246,558) in view of Halbeck (4,002,951) and Knecht et al. (US 5,635,690), as applied to claims 1 and 6 above, and further in view of Davis et al. (US 3,913,046).

Regarding claim 2, DiSalvo et al. discloses that reset portion (30, 100, 102, 104, 106) can operate to reestablish said electrical continuity in the case the device is operational, is not in an open neutral condition and is not reverse wired. See 5:47-55. The reference does not disclose that the reset portion (30, 100, 102, 104, 106) is

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operated by a prong of a plug, so that insertion of the plug into the receptacle is effective to reestablish said electrical continuity.

However, Davis et al. discloses a circuit interrupting device in which a reset portion is operated by a prong of a plug (34), so that insertion of the plug (34) into a receptacle (10) is effective to reestablish said electrical continuity. See 7:21-33 and 11:1-4. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the reset feature of Davis et al. in the circuit interrupting device of DiSalvo et al. in view of Halbeck and Knecht et al. in order to provide a means for manual reset in the event of a failed automatic reset feature, as disclosed by Davis et al.

Regarding claim 7, claim 7 corresponds to claim 2 and is rejected under the same reasoning as that of claim 2. See above rejection.

Response to Arguments

4. Applicant's arguments filed 05/09/07 have been fully considered but they are not persuasive.

Regarding Applicant's argument that amended independent claims 1 and 6 avoid the art of record by reciting the structure of "...the switch means is operated by a prong of a plug, so that both insertion of a plug into a receptacle in the housing and removal of a plug from a receptacle in the housing is effective to cause said electrical discontinuity...", Examiner asserts that these features have been addressed by Halbeck and Knecht et al. Halbeck teaches a switch means operated by a prong of a plug so that insertion of a plug into a receptacle causes electrical discontinuity. Knecht et al.

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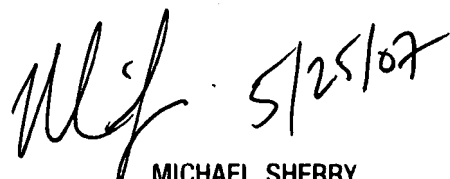
teaches a switch means operated by a prong of a plug so that removal of a plug from a receptacle causes electrical discontinuity. See above rejection on claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann T. Hoang, whose telephone number is 571-272-2724. The examiner can normally be reached on Monday-Thursday and every other Friday, 8 a.m. to 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry, can be reached at 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ATH/
5/23/07

 5/25/07
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